



EOSDIS

NASA'S EARTH OBSERVING SYSTEM
DATA AND INFORMATION SYSTEM

CMR Catalog Service for the Web

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Agenda

- What is CSW?
- Why CSW?
- API
- Current status
- Synopsis

WHAT IS CSW?

Catalog Service for the Web

From OGC website:

‘Catalog services support the ability ... search collections of descriptive information (metadata) for data, services, and related information objects. ... Catalogue services are required to support the discovery and binding to registered information resources within an information community.

OGC Catalog interface standards specify the interfaces, bindings, and a framework for defining application profiles required to publish and access digital catalogs of metadata for geospatial data, services, and related resource information...’

WHY CSW?

Why?

- GCMD/IDN provides a CSW for it's collection metadata. CMR is now mandated to provide all APIs for the GCMD/IDN
- It is a widely-used earth data discovery standard
- CWIC maintains a CSW framework for interoperability

API

Base URL

<https://cmr.earthdata.nasa.gov/csw/collections>

Service description

- GetCapabilities is supported via GET and POST
- GET example:

?request=**GetCapabilities**&service=CSW&version=2.0.2

Finding collections

- GetRecords is supported via POST
- POST example:

```
<CSW:GetRecords
  startPosition="1"
  maxRecords="10"  outputFormat="application/xml"
  outputSchema="http://www.isotc211.org/2005/gmd"
  resultType="results"  service="CSW"  version="2.0.2">
  <csw:Query  typeNames="csw:Record">
    <csw:ElementSetName>brief</csw:ElementSetName>
  </csw:Query>
</CSW:GetRecords>
```

Portraying collections

- GetRecordById is supported via GET and POST
- GET example:

request=**GetRecordById**&service=CSW&version=2.0.2&id=C1224520098-NOAA_NCEI&**ElementSetName**=full

Describing supported formats

- DescribeRecord is supported via GET and POST
- GET example:

request=**DescribeRecord**&service=CSW&version=2.0.2&**NAMESPACE**
E=xmlns(csw=http://www.opengis.net/cat/csw/2.0.2)&**typeName**=csw:record

Describing parameters

- GetDomain is supported via GET and POST
- GET example:

request=**GetDomain**&service=CSW&version=2.0.2&**PropertyName**=Platform

CURRENT STATUS

Supported output schemas

- csw:Record
- gmi:MI_Metadata (ISO MENDS)
- gmd:MD_Metadata (CSW ISO standard)

Supported query parameters

- Title
- AnyText
- Modified
- BoundingBox, polygon, line, point
- TempExtent_begin and TempExtent_end
- Instrument
- Platform
- ScienceKeywords

CWIC support

- Any collection who's granules are contained within the CWIC infrastructure are tagged with the following keyword element
- Csw:Record example

`<dc:subject>CWIC > CEOS WGISS Integrated Catalog</dc:subject>`

SYNOPSIS

- The power and performance of CMR
- An(other) standards based API
- ISO (gmd and gml) and CSW metadata support
- CWIC integration for non-NASA datasets

UPCOMING

Granule support and stuff

- csw/granules?
- Loose coupling between collections and granules
- 3.0 when it is released
 - Submission Date: 2014-03-11
 - Approval Date: 2016-02-23
 - Publication Date: 2016-mm-dd

QUESTIONS?

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